

In re: Nojima et al.  
Serial No.: 10/705,365  
Filed: November 10, 2003

#### REMARKS

Claims 8–18 are pending in this application. The claims are objected to for informalities, stand rejected as being indefinite, and for allegedly being anticipated or in the alternative as allegedly being obvious. Applicants request entry of the amendments provided above and request further consideration of the application in view of the amendments above and the comments below.

#### Support for Claim Amendments

The amendments presented above have been made to recite particular features of the inventions so as to expedite the prosecution of the present application to allowance in accordance with the USPTO Patent Business Goals (65 Fed. Reg. 54603, September 8, 2000). These amendments do not represent an acquiescence or agreement with any of the outstanding rejections.

Claims 8, 11 and 18 are amended herein to address informalities and to more particularly point out what Applicants regard as the invention. Claim 12 is canceled herein without prejudice in view of the present amendments to claim 8. Support for the amendments to the claims can be found throughout the specification and in the claims as originally filed. The rejections of the pending claims are discussed hereinbelow in the order in which they appear in the Action.

#### Claim Objections:

The Examiner objects to claims 8, 12 and 18 for various informalities. Accordingly, Applicants have amended claims 8 and 18 herein as suggested by the Examiner and have canceled claim 12. In view of the foregoing, Applicants believe that these amendments address the objections of the Examiner in full, to which Applicants respectfully request withdrawal of the instant objections. However, should the Examiner has any further issues in regard to this matter,

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Applicants respectfully request that the Examiner provide further suggestions in order to address and resolve this matter.

**Claim Rejections - 35 U.S.C. § 112 (Second Paragraph):**

Claims 11 and 18 stand rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out what Applicants regard as the invention. Applicants have amended claims 11 and 18 herein to recite: "0.4 to 5 wt.% based on the weight of the surface layer of the catalyst."

In view of the foregoing, Applicants believe that the instant claims satisfy the requirements of 35 U.S.C. § 112, second paragraph and respectfully request that the rejections on this basis be withdrawn.

**Claim Rejections - 35 U.S.C. § 102(b)/103:**

Claims 8–17 stand rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 4,466,947 to Imanari et al. (hereinafter, "Imanari et al."). The Examiner indicates in the Action that the rejected claims are 7–17. However, as claim 7 is presently not under consideration, Applicants believe that this is an inadvertent oversight.

The Examiner alleges that Imanari et al. disclose a denitration catalyst comprising a mixture of titanium dioxide and tungsten oxide as porous molded article, and a vanadium compound ( $V_2O_5$ ) as an active compound with specifications that read on the denitration catalyst as presently claimed. The Examiner also asserts that the process limitation "using a vapor phase method" has no bearing on the patentability of the claimed product because it is held that the patentability of a product and the method of its production are separately determined. The Examiner further points out that while the catalyst of Imanari et al. is not made by the same process, the catalyst made and disclosed is the same as being claimed.

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Applicants have amended claim 8 herein, incorporating the recitation wherein the vanadium pentoxide has a crystallite size of 8 nm or less as measured by X-ray diffraction.

Case law holds and the Manual for Patent Examination Procedure ("M.P.E.P.") states that a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Brothers v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Furthermore, the identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Additionally, anticipation under 35 U.S.C. § 102 requires the disclosure in a single piece of prior art of each and every limitation of a claimed invention. *Apple Computer Inc. v. Articulate Systems Inc.* 57 USPQ2d 1057, 1061 (Fed. Cir. 2000). Furthermore, a finding of anticipation further requires that there must be no difference between the claimed invention and the disclosure of the cited reference as viewed by one of ordinary skill in the art. See *Scripps Clinic & Research Foundation v. Genentech Inc.*, 927 F.2d 1565, 1576, 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991). Additionally, the cited prior art reference must be enabling, thereby placing the allegedly disclosed matter in the possession of the public. *In re Brown*, 329 F.2d 1006, 1011, 141 U.S.P.Q. 245, 249 (C.C.P.A. 1964). Thus, the prior art reference must adequately describe the claimed invention so that a person of ordinary skill in the art could make and use the invention.

Furthermore, to establish a *prima facie* case of obviousness, Applicants point out that the prior art reference, or references when combined, must teach or suggest *all* the recitations of the claim, and there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. See M.P.E.P. § 2143.

Imanari et al. describes a denitration catalyst comprising a mixture of titanium dioxide and tungsten trioxide as a porous molded article and vanadium pentoxide as an active compound, supported on the surface of the catalyst body (substrate) by methods of dipping and spraying (column 3, line 49–column 4, line 19). The crystallite size of vanadium pentoxide supported on a

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surface by the conventional methods of dipping and spraying, as outlined by Imanari et al., are not as fine as the crystallite size of 8 nm or less of vanadium pentoxide supported on the surface of an extruded catalyst body by a vapor phase method. Applicants present, in view of the amendments to the claims, that Imanari et al. does not disclose all the aspects of the claimed invention nor adequately describes the claimed invention so that a person of ordinary skill in the art could make and use the invention. Thus, in view of the foregoing, Applicants present that claims 8-17 are neither anticipated by nor obvious over Imanari et al., to which Applicants respectfully request that the instant rejections be withdrawn.

**Claim Rejections - 35 U.S.C. § 102(b):**

Claim 18 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Imanari et al. The Examiner alleges that the presently claimed catalyst reads on the catalyst disclosed in Imanari et al.

Applicants amend claim 18 herein, incorporating the recitation wherein the vanadium pentoxide has a crystallite size of 8 nm or less as measured by X-ray diffraction. As presented hereinabove, in view of the present claim amendments, vanadium pentoxide supported by a vapor phase method, provides a finer crystallite size (less than 8 nm) than vanadium pentoxide produced by the methods of dipping or spraying as taught by Imanari et al. Thus, Imanari et al. does not disclose all the aspects of the presently claimed invention nor adequately describes the claimed invention so that a person of ordinary skill in the art could make and use the invention. In view of the foregoing, Applicants present that claim 18 is not anticipated by Imanari et al., to which applicants respectfully request that the instant rejection be withdrawn.

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### CONCLUSIONS

Applicants believe that the points and concerns raised by the Examiner in the Action have been addressed in full, it is respectfully submitted that this application is in condition for allowance. Should the Examiner have any remaining concerns, it is respectfully requested that the Examiner contact the undersigned Attorney at (919) 854-1400 to expedite the prosecution of this application to allowance.

No fee is believed due with this paper. Applicants believe this amount to be correct; however, the Commissioner is hereby authorized to charge any deficiency or credit any refund to Deposit Account No. 50-0220.

Respectfully submitted,

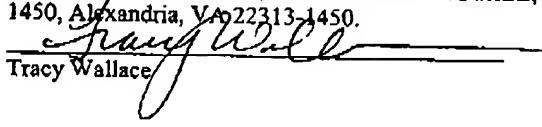


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**CERTIFICATION OF FACSIMILE TRANSMISSION  
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Tracy Wallace